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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,937	12/07/2000	Joseph L. Hellerstein	YOR920000581US1	9790
7590 William E. Lewis, Ryan, Mason & Lewis, LLP 90 Forest Avenue Locust Valley, NY 11560			EXAMINER NGUYEN, THANH T	
			ART UNIT 2144	PAPER NUMBER
			MAIL DATE 06/15/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 09/731,937	Applicant(s) HELLERSTEIN ET AL.	
	Examiner Tammy T. Nguyen	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |



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*Detailed Office Action*

1. This action is in response to the amendment filed on January 23, 2007.
2. Claims 1-20 pending.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pohlmann et al., (hereinafter Pohlmann) U.S. Patent No. 6,446,136 in view of Aravamudan et al., (hereinafter Aravamudan) U.S. Patent No. 6,584,186.
5. As to claim 1, Pohlmann teaches the invention as claimed, including a computer-based method of constructing one or more correlation rules for use by an event management system for managing a network with one or more computing devices, the method comprising the steps of: selecting one or more event patterns representing event data associated with the network of computing devices being managed by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22); automatically learning predicates of the one or more correlation rules from the one or more selected event patterns (col.col.5, lines 45-51, col.6, lines 14-19, col.5, lines 33-35); But, Pohlmann does not teach adding one or more corresponding actions to the one or more automatically learned predicates to form the one or more correlation rules. However, Aravamudan teaches adding one or more actions to automatically learned predicates to from the one or more correlation rules (see col.14, lines 15-35). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Pohlmann and Aravamudan to have one or more corresponding actions to the one or more automatically learn predicates to form the one or more correlation rules because it would have allowed providers to perform automatic dynamic

market testing and automatically adjusted served content based on responses from users.

6. As to claim 2, Pohlmann teaches the invention as claimed, further comprising the step of storing the one or more correlation rules in a rule database for access by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22).
7. As to claim 3, Pohlmann teaches the invention as claimed, wherein the event pattern selection step further comprises the step of a user marking the one or more event patterns in accordance with a data visualization of at least a portion of the event data (col.4, lines 27-35).
8. As to claim 4, Pohlmann teaches the invention as claimed, wherein the event pattern selection step employs a data mining algorithm (col.9, lines 1-5).
9. As to claim 5, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning step comprises the steps of: learning an initial concept ; determining if acceptance criteria are met given the event data (col.5, lines 30-39, and col.6, lines 13-19); querying historical event data for similar event patterns (col.5, lines 27-35); and allowing the user to edit the initial concept based on the historical event data query (col.13, lines 23-28).
10. As to claim 6, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning step utilizes one or more abstraction hierarchies (col.13 lines 14-20, and col.12, lines 46-50).

11. As to claim 7, Pohlmann teaches the invention as claimed, wherein the one or more abstraction hierarchies comprise a hierarchy for at least one of a host and an event type (col.4, lines 4, lines 27-45).
12. As to claim 8, Pohlmann teaches the invention as claimed, including apparatus for constructing one or more correlation rules for use by an event management system for managing a network with one or more computing devices, the apparatus comprising: at least one processor operative to: (i) permit selection of one or more event patterns representing event data associated with the network of computing devices being managed by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22); (ii) automatically learn predicates of the one or more correlation rules from the one or more selected event patterns (col.col.5, lines 45-51, col.6, lines 14-19, col.5, lines 33-35); and a memory, coupled to the at least one processor, which stores the one or more correlation rules for access by the event management system (col.2, lines 15-30, and col.2, lines 52-55). But, Pohlmann does not teach adding one or more corresponding actions to the one or more automatically learned predicates to form the one or more correlation rules. However, Aravamudan teaches adding one or more actions to automatically learned predicates to form the one or more correlation rules (see col.14, lines 15-35). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Pohlmann and Aravamudan to have one or more corresponding actions to the one or more automatically learn predicates to form the one or more correlation rules

because it would have allowed providers to perform automatic dynamic market testing and automatically adjusted served content based on responses from users.

13. As to claim 9, Pohlmann teaches the invention as claimed, wherein the event pattern selection operation further comprises a user marking the one or more event patterns in accordance with a data visualization of at least a portion of the event data (col.4, lines 27-35).
14. As to claim 10, Pohlmann teaches the invention as claimed, wherein the event pattern selection operation employs a data mining algorithm (col.9, lines 1-5).
15. As to claim 11, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning operation further comprises: (i) learning an initial concept; (ii) determining if acceptance criteria are met given the event data (col.5, lines 30-39, and col.6, lines 13-19); (iii) querying historical event data for similar event patterns (col.5, lines 26-35, and col.8, lines 20-25); and (iv) allowing the user to edit the initial concept based on the historical event data query (col.13, lines 23-28).
16. As to claim 12, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning operation utilizes one or more abstraction hierarchies (col.13 lines 14-20, and col.12, lines 46-50).
17. As to claim 13, Pohlmann teaches the invention as claimed, wherein the one or more abstraction hierarchies comprise a hierarchy for at least one of a host and an event type (col.4, lines 4, lines 27-45).

18. As to claim 14, Pohmann teaches the invention as claimed, an article of manufacture for constructing one or more correlation rules for use by an event management system for managing a network with one or more computing devices, the article comprising a machine readable medium containing one or more programs which when executed implement at least one of the steps of: selecting one or more event patterns representing event data associated with the network of computing devices being managed by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22); But, Pohmann does not teach adding one or more corresponding actions to the one or more automatically learned predicates to form the one or more correlation rules. However, Aravamudan teaches adding one or more actions to automatically learned predicates to form the one or more correlation rules (see col.14, lines 15-35). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Pohlmann and Aravamudan to have one or more corresponding actions to the one or more automatically learn predicates to form the one or more correlation rules because it would have allowed providers to perform automatic dynamic market testing and automatically adjusted served content based on responses from users.
19. As to claim 15, Pohlmann teaches the invention as claimed, further comprising the step of storing the one or more correlation rules in a rule database for access by the event management system (col.2, lines 50-55, col.4, lines 60-67 and col.2, lines 13-22).



20. As to claim 16, Pohlmann teaches the invention as claimed, wherein the event pattern selection step further comprises the step of a user marking the one or more event patterns in accordance with a data visualization of at least a portion of the event data (col.4, lines 27-35).
21. As to claim 17, Pohlmann teaches the invention as claimed, wherein the event pattern selection step employs a data mining algorithm (col.9, lines 1-5).
22. As to claim 18, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning step comprises the steps of: learning an initial concept; determining if acceptance criteria are met given the event data (col.5, lines 30-39, and col.6, lines 13-19); querying historical event data for similar event patterns (col.5, lines 27-35); and allowing the user to edit the initial concept based on the historical event data query (col.13, lines 23-28).
23. As to claim 19, Pohlmann teaches the invention as claimed, wherein the automatic predicate learning step utilizes one or more abstraction hierarchies (col.13 lines 14-20, and col.12, lines 46-50).
24. As to claim 20, Pohlmann teaches the invention as claimed, wherein the one or more abstraction hierarchies comprise a hierarchy for at least one of a host and an event type (col.4, lines 4, lines 27-45).

### ***Response to Arguments***

25. Applicant's arguments filed on January 23, 2007 have been fully considered, however they are not persuasive because of the following reasons:

26. In response to applicant's argument that there is no suggestion to combine Pohlmann and Koepel the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have allowed providers to perform automatic dynamic market testing and automatically adjusted served content based on responses from users.
27. Applicants argue that Aravamudan does not teach automatically learning predicates of the correlation rules from selected event patterns. In response to Applicant's argument, the Patent Examiner maintain the rejection because Aravamudan does teach automatically learning predicates of the correlation rules from selected event patterns as shown in, clearly shown in col. 14, lines 15-35. Aravamudan clearly shows predicates of the correlation rules for selected event pattern (since Aravamudan does not mention or indicate about manually learning predicate, therefore, it is automatically learning). Thus Aravamudan teaches the application claimed invention.
28. Therefore, the Examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims 1, 8, and 14. Claims 2-7, 9-13, and 15-20 are also rejected at least by the virtue of their dependency on

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independent claims and by other reasons set forth in the previous office action.

29. Accordingly, claims 1-20 are respectfully rejected.

### ***Conclusion***

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ***William Vaughn*** can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 30, 2007

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